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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/540,649

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EXAMINER

FISHER, ABIGAIL L

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/540,649	Applicant(s) PARK ET AL.	
	Examiner ABIGAIL FISHER	Art Unit 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9,11-25 and 27-31 is/are pending in the application.
- 4a) Of the above claim(s) 27-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,9 and 11-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Receipt of Amendments/Remarks filed on May 7 2008 is acknowledged. Claims 8, 10 and 26 were/stand cancelled. Claims 1, 3, 7, 11-13, 16, 18 and 24-25 amended. Claims 1-7, 9, 11-25 and 27-31 are pending. Claims 27-31 are withdrawn as being directed to a non-elected invention. Claims **1-7, 9 and 11-25** are directed to the elected invention.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The rejection of claim 24 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention is **withdrawn** in light of Applicants' amendments filed on May 7 2008.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The rejection of claims 1-2, 11-14 and 16-23 under 35 U.S.C. 102(b) as being anticipated by Mitchnick et al. (US Patent No. 5441726, cited on PTO Form 1449) is **withdrawn** in light of Applicants' amendments filed on May 7 2008 deleting zinc oxide as a choice for a particle.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Applicant Claims
2. Determining the scope and contents of the prior art.
3. Ascertaining the differences between the prior art and the claims at issue, and resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The rejection of claims 3 and 25 under 35 U.S.C. 103(a) as being unpatentable over Mitchnick et al. is **withdrawn** in light of Applicants' amendments filed on May 7 2008 deleting zinc oxide as a choice for a particle.

The rejection of claims 4-10, 15 and 24 under 35 U.S.C. 103(a) as being unpatentable over Mitchnick et al. in view of Knowland et al. (WO 99/60994, cited on PTO Form 1449) is **withdrawn** in light of Applicants' amendments filed on May 7 2008 deleting zinc oxide as a choice for a particle.

Claims 1-7, 9 and 11-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knowland et al. (WO 99/60994, cited on PTO Form 1449) in view of Mitchnick et al. (cited on PTO Form 1449).

Applicant Claims

Applicant claims a UV suncreening composition comprising one or more organic components and an amount of titanium dioxide which is doped with one or more element. This composition has a rate of loss of UV absorption at least 5% less than that of a composition having the same formulation except that it does not contain the said titanium dioxide and/or zinc oxide which has been doped with another element or the said reduced zinc oxide.

A specific species claimed for the dopant is manganese. The dopant is present in an amount from 0.05 to 10 mole% (or 0.5 to 2 mole %). When the composition comprises titanium dioxide, the titanium dioxide is in rutile form. A dependent claim indicates that the titanium dioxide is coated with an inorganic or organic solvent. The composition further comprises titanium dioxide and/or zinc oxide which has not been doped or reduced. The organic component is a sunscreen agent that absorbs UV light in the UVA region.

Determination of the Scope and Content of the Prior Art (MPEP §2141.01)

Knowland et al. teaches UV screening compositions comprising particles capable of absorbing UV light. It is taught that sunscreens typically contain titanium dioxide to reflect and/or absorb UV light (column 1, lines 11-12). The particle size is generally from 1 to 200 nm (page 3, lines 22-23). The particles may also be titanium or zinc oxide that has been doped with nickel, iron, chromium, aluminum, manganese, among others (page 5, lines 1-7). Example 3 is directed to manganese doped titanium dioxide. It is disclosed that titanium dioxide can be rutile, anatase, or a combination thereof. The table on page 13 discloses the ability of the different forms in oxidative degradation of phenol. Knowland et al. teaches 0.5% manganese has shown to be effective, however as low as 0.05% or as high as 10% may also be used (page 5, lines 17-20). Knowland et al. teaches that the particles may have an inorganic or organic coating (page 6, lines 25-26). Knowland et al. teaches the compositions comprising these particles may additionally contain silicones, other UVA, UVB, or broad-band sunscreen agents, colorants, metal oxide pigments, among others (page 7, lines 16-22). The metal oxides are present at a concentration of about 0.5 to 10% by weight and such compositions may comprise one or more of the compositions of the invention (page 7, lines 8-11). The compositions can be in the form of lotions gels, creams, powders, aerosols, foams, sprays, etc. (page 7, lines 12-15).

Ascertainment of the Difference Between Scope the Prior Art and the Claims (MPEP §2141.012)

Knowland et al. does not exemplify a formulation comprising doped titanium dioxide and an UVA, UVB or broadband sunscreen ingredient. Knowland et al. does

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not specify a particular UVA, UVB or broadband sunscreen ingredient. Knowland et al. does not exemplify the incorporation of titanium dioxide that is not doped. Knowland et al. does not exemplify coating the titanium dioxide particles with inorganic or organic solvents rendering them water-disperable or oil-dispersible. However, these deficiencies are cured by Mitchnick et al.

Mitchnick et al. discloses sunscreen lotions containing water, emulsifier, zinc and/or titanium oxides and a UVB absorber (column 11, lines 25-26). Exemplified UVB absorber is octyl methoxycinnamate (column 12). Doped zinc oxides are exemplified. The dopants include Bi and aluminum (column 10). The zinc oxide may be surface modified in order to make them more compatible in a given formulation. One example of a surface modification is a silicone-like compound in order to increase the zinc oxides compatibility with oil-based formulations (column 11, lines 17-21).

***Finding of Prima Facie Obviousness Rational and Motivation
(MPEP §2142-2143)***

It would have been obvious to one of ordinary skill in the art to utilize UVA, UVB, or broadband sunscreen agents in the formulation of Knowland et al. One of ordinary skill in the art would have been motivated to add any of these ingredients to example 3 because they are taught by Knowland et al. as being suitable ingredients to incorporate into the invention of Knowland et al. Furthermore, the compositions of Knowland et al. are taught as being sunscreen compositions and UVA, UVB or broadband sunscreen agents are ingredients commonly utilized in the art for these types of compositions. As a general principle it is *prima facie* obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third

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composition to be used for the very same purpose, the idea of combining them flows logically from their having been individually taught in the prior art. See *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980) **MPEP 2144.06**.

It would have been obvious to one of ordinary skill in the art to combine the teachings of Knowland et al. and Mitchnick et al. and utilize octyl methoxycinnamate as the UVA, UVB or broadband sunscreen agent. It would have been obvious to one of ordinary skill in the art to utilize this sunscreen agent as it is taught by Mitchnick et al. to be suitable in sunscreen formulations comprising doped oxide particles.

It would have been obvious to one of ordinary skill in the art to combine the teachings of Knowland et al. and Mitchnick et al. and utilize non-doped zinc oxide or titanium dioxide. One of ordinary skill in the art would have been motivated to utilize these particles in addition to those already taught by Knowland et al. because they are taught by both Knowland et al and Mitchnick et al. as being typical ingredients utilized in sunscreen formulations and are taught by Mitchnick et al. to be incorporated into sunscreen products comprising doped oxide particles. As a general principle it is *prima facie* obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose, the idea of combining them flows logically from their having been individually taught in the prior art. See *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980) **MPEP 2144.06**.

It would have been obvious to one of ordinary skill in the art to combine the teachings of Knowland et al. and Mitchnick et al. and utilize particles coated with an

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inorganic solvent. One of ordinary skill in the art would have been motivated to coat the particles because Mitchnick et al. discloses that surface modified make them more compatible in a given formulations and Knowland et al. indicates that they can have an inorganic or organic coating. Therefore depending on the desired formulation of the particles to be used, it would have been obvious to one of ordinary skill in the art to coat the particles. These types of coatings would allow for a subset of the particles to oil-soluble, as Mitchnick et al. indicates, and another subset of the particles to be water-soluble, as Knowland et al. indicates. This would allow for the particles to be present in both phases of the composition and subsequently better coverage.

Regarding the functional limitations in claim 1, claim 17, claim 18, and claim 19, Knowland et al. discloses the same claimed composition comprising organic components and doped titanium dioxide. Note MPEP 2112.02 (1I): "Products of identical chemical composition can not have mutually exclusive properties." A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. In re Spada, 911 F.2d 705,709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Absent any evidence to the contrary, and based upon the teachings of the prior art, there would have been a reasonable expectation of success in practicing the instantly claimed invention. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

Response to Arguments

Applicant's arguments with respect to claims 1-7, 9 and 11-25 have been considered but are moot in view of the new ground(s) of rejection. However, the examiner would like to address several arguments made against Mitchnick et al. as that reference is still utilized in the current rejection set forth.

Applicants' argue that (1) there is no recognition in either document that the presence of doped titanium dioxide has a beneficial effect in reducing or preventing degradation of one or more other organic ingredients present in the sunscreen composition. Applicants' argue that (2) Mitchnick may be regard as implicitly teaching that a composition should not contain both an organic sunscreen agent and titanium dioxide due to the exemplified embodiments.

Regarding applicants' first argument, the instant invention is directed to a product. The product of Knowland et al. possesses the same doped titanium dioxide therefore it would necessarily possess the same features as indicated by Applicant. The fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Regarding applicants' second argument, the rejection is made under 103 and therefore is available as prior art for all that it teaches not just exemplifies. Mitchnick et al. teach that the sunscreen lotions contain water, emulsifier, zinc and/or titanium oxides

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and a UVB absorber. Therefore, Mitchnick et al. does teach the combination of doped particles with a sunscreen agent.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

The provisional rejection of claims 1-7, 9 and 11-25 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-14, 16-17, and 20-21 of copending Application No. 11/054188 and 11/207408 in view of Mitchnick et al. is **withdrawn** in light of Applicants' amendments filed on May 7 2008.

The rejection of claims 1-7, 11-25 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4, 7-8, and 10 of U.S. Patent No. 6869569 in view of Mitchnick et al. is **withdrawn** in light of

Applicants' amendments filed on May 7 2008. The examiner would like to note that the US Patent No. listed in the previous office action was mistakenly written. The last two numbers of the patent number were reversed. The correct patent number is 6869596 not 6869569. Since this is a non-statutory double patenting rejection the patent must be either commonly owned or have one common inventor. Therefore, the Applicants should be aware of their own work and easily recognize the accidental flip of the last two numbers of the patent. Furthermore, the examiner clearly indicated the what the patent was directed to in the Office action.

Claims 1-7, 9 and 11-25 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-29 of copending Application No. 10/563062. Although the conflicting claims are not identical, they are not patentably distinct from each other because they overlap in scope.

Both applications are directed to compositions which comprise doped titanium dioxide. The instant application claims an organic component while copending '062 claims an ingredient which is adversely affected by UV light in the presence of titanium dioxide and/or zinc oxide. A particular species of organic component as well as ingredient which is adversely affected is a UV sunscreen agent. Copending '062 claims all the instant limitations in the dependent claims. Therefore, both the instant application and '062 are directed to similar subject matter.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

Applicants' argue that the amendment provides a distinction over the copending claims.

Applicant's arguments filed May 7 2008 have been fully considered but they are not persuasive.

Claim 2 of copending '062 claims that the composition further comprises non-doped titanium dioxide. Therefore, the scopes of copending '062 and the instant application overlap and thus they are obvious variants of one another.

Claims 1-7, 9 and 11-25 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 8, 10-12, 16-20, 24-29, 50-52, and 54-55 of copending Application No. 10/588071. Although the conflicting claims are not identical, they are not patentably distinct from each other because they overlap in scope.

Both applications are directed to compositions which comprise doped titanium dioxide and/or zinc oxide. The instant application claims an organic component while copending '071 claims an ingredient which is adversely affected by UV light in the presence of titanium dioxide and/or zinc oxide. A particular species of organic component as well as ingredient which is adversely affected is a UV sunscreen agent.

Copending '071 claims all the instant limitations in the dependent claims. Therefore, both the instant application and '071 are directed to similar subject matter.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

Applicants' argue that the amendment provides a distinction over the copending claims.

Applicant's arguments filed May 7 2008 have been fully considered but they are not persuasive.

Claim 8 of copending '071 claims that the composition further comprises non-doped titanium dioxide. Therefore, the scopes of copending '071 and the instant application overlap and thus they are obvious variants of one another.

Claims 1-7, 9 and 11-25 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-11, and 14, of copending Application No. 10/555570. Although the conflicting claims are not identical, they are not patentably distinct from each other because they overlap in scope.

Both applications are directed to compositions which comprise doped titanium dioxide. Copending '570 claims that the product has a physical factor at least 5% less than that of a composition having the same formulation except that it does not contain

doped titanium dioxide and/or zinc oxide. The instant application claims a specific physical factor (rate of loss of UV absorption). Copending '570 claims all the instant limitations in the dependent claims. Therefore, both the instant application and '071 are directed to similar subject matter.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

Applicants' argue that the amendment provides a distinction over the copending claims.

Applicant's arguments filed May 7 2008 have been fully considered but they are not persuasive.

Claim 14 of copending '570 claims that the composition further comprises non-doped titanium dioxide. Therefore, the scopes of copending '570 and the instant application overlap and thus they are obvious variants of one another.

Claims 1-7, 9 and 11-25 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-14, 16-17, and 20-21 of copending Application No. 11/054188 and 11/207408 in view of Knowland et al.

The instant application is directed to UV screening composition comprising organic components and doped titanium dioxide.

Copending '188 and '408 claims a UV screening composition comprising particles. The particles as claimed include reduced zinc oxide, or zinc oxide and titanium dioxide with a second component. The second components overlap with the dopants of the instant application as well as the percentages claimed.

Copending '188 and '408 do not claim that sunscreen agent can be added. Copending '188 and '408 does not claim the composition is in the form of a lotion, gel, etc. or that the composition further contains non-doped particles. However, these deficiencies are cured by Knowland et al.

Knowland et al. teaches UV screening compositions comprising particles capable of absorbing UV light. It is taught that sunscreens typically contain titanium dioxide to reflect and/or absorb UV light (column 1, lines 11-12). It is disclosed that titanium dioxide can be rutile, anatase, or a combination thereof. The compositions can be in the form of lotions gels, creams, powders, aerosols, foams, sprays, etc. (page 7, lines 12-15).

It would have been obvious to one of ordinary skill in the art to combine the teachings of copending '188 or '408 and Knowland et al. and utilize sunscreen agents and non-doped titanium dioxide or zinc oxide. One of ordinary skill in the art would have been motivated to add these components as copending '188 and '408 are directed to UV screening compositions and sunscreen agents and titanium dioxide are taught by Knowland et al. as components typically utilized in screen compositions to reflect and/or absorb light. As a general principle it is *prima facie* obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose,

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in order to form a third composition to be used for the very same purpose, the idea of combining them flows logically from their having been individually taught in the prior art. See *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980) **MPEP 2144.06**.

It would have been obvious to one of ordinary skill in the art to formulate the UV screening composition of '188 and '408 into a cream or lotion as it was known that these are well known forms of sunscreens as taught by Knowland et al.

Therefore, the scopes of the copending claims and the instant application overlap and thus they are obvious variants of one another.

This is a provisional obviousness-type double patenting rejection.

Claims 1-7, 9 and 11-25 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4, 7-8, and 10 of U.S. Patent No. 6869596 in view of Knowland et al.

The instant application is directed to UV screening composition comprising organic components and doped titanium dioxide.

Patent '596 claims a UV screening composition comprising zinc oxide particles incorporating manganese or chromium. It is additionally claimed that the UV screening composition further comprises UVA, UVB, or broad-band sunscreen agents.

Patent '596 does not claim the composition is in the form of a lotion, gel, etc. or that the particles can be coated. Patent '596 does not claim doped titanium dioxide.

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Patent '596 does not claim that the composition further comprises non-doped titanium or zinc oxides. However, these deficiencies are cured by Knowland et al.

Knowland et al. teaches UV screening compositions comprising particles capable of absorbing UV light. It is taught that sunscreens typically contain titanium dioxide to reflect and/or absorb UV light (column 1, lines 11-12). It is disclosed that titanium dioxide can be rutile, anatase, or a combination thereof. The compositions can be in the form of lotions gels, creams, powders, aerosols, foams, sprays, etc. (page 7, lines 12-15). Knowland et al. teaches that UV screening compositions can comprises either doped titanium dioxide and/or zinc oxide (page 5, lines 1-5).

It would have been obvious to one of ordinary skill in the art to combine the teachings of Patent '596 and Knowland et al. and utilize doped titanium dioxide instead of doped zinc oxide. One of ordinary skill in the art would have been motivated to replace doped zinc oxide with doped titanium dioxide as both are taught by Knowland et al. as functional equivalents.

It would have been obvious to one of ordinary skill in the art to combine the teachings of copending Patent '596 and Knowland et al. and utilize sunscreen agents and non-doped titanium dioxide or zinc oxide. One of ordinary skill in the art would have been motivated to add these components as Patent '596 are directed to UV screening compositions and sunscreen agents and titanium dioxide are taught by Knowland et al. as components typically utilized in screen compositions to reflect and/or absorb light. As a general principle it is *prima facie* obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose,

in order to form a third composition to be used for the very same purpose, the idea of combining them flows logically from their having been individually taught in the prior art. See *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980) **MPEP 2144.06**.

It would have been obvious to one of ordinary skill in the art to formulate the UV screening composition of Patent '596 into a cream or lotion as it was known that these are well known forms of sunscreens as taught by Knowland et al.

Conclusion

No claims are allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ABIGAIL FISHER whose telephone number is (571)270-3502. The examiner can normally be reached on M-Th 9am-6pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Abigail Fisher
Examiner
Art Unit 1616

AF

/Mina Haghighatian/
Primary Examiner, Art Unit 1616